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Original Communications.

WOUND OF THE FEMORAL ARTERY. LIGATURE OF THE EXTERNAL ILIAC. SUBSEQUENT AMPUTATION. RECOVERY.

By DAVID W. CHEEVER, M.D., of Boston.

ON February 29, 1872, T. S., a healthy boy, of 16 years, had a quarrel with a companion on board the School-ship. Shortly after, as the boys were sitting side by side, his adversary, in rising, struck the patient a back-handed blow with a knife. The wound was a narrow, punctured one, in the left groin, just below Poupart's ligament. Its direction was downwards and inwards. Profuse hæmorrhage immediately came on. The officers of the ship twisted a rope round the groin, and partially arrested it. Meanwhile, physicians arrived, and finally stopped the bleeding by a large pad, compress, and tight, spica bandage over the wound. These were temporary measures, and the only ones that could be employed at the moment. The patient's condition was one of alarming syncope; and, at one time, the radial pulse ceased. He slowly rallied, after the bleeding was stopped, and was then carefully transported to the City Hospital, where he arrived safely, and without farther hæmorrhage. The bleeding being under control, it was thought best to await the progress of events. He was confined to bed, and a special watch set over him. Matters went on quietly for forty-eight hours. He ate a good deal, slept, and recovered animation and strength. In the afternoon of March 2d, as the patient was raising his back for the bed-pan, hæmorrhage came on. The assistant immediately arrested it by pressure with the hand; and the house-surgeon, arriving, cut off the bandage, applied a new compress, and secured the bleeding by a tourniquet and roller-pad directly over the wound. Not more than two ounces of blood were lost.

I was then sent for, and at 7, P.M., had the patient etherized, in order to attempt more permanent measures to arrest the hæmorrhage. On removing the tourniquet and compress, the color, force and quantity of the blood poured out did not leave much doubt that we had to deal with a wound of the femoral artery. It was found that the bleeding came very nearly from under Poupart's ligament. Bleeding could be controlled by pressure of the fingers in the wound; and, aided also by pressure over the bone above, the wound was enlarged, and attempts made to secure the bleeding vessel in the wound. Repeated gushes of blood, however, foiled our efforts; and as the patient was again becoming very feeble, it was deemed more prudent to secure the main trunk above. The tourniquet and roller-pad were again applied to the wound, and the bleeding wholly checked.

An incision was made above Poupart's ligament, curving upwards and outwards towards the spine of the ilium. The muscles and transversalis fascia were cautiously traversed; the peritoneum was pushed back, and the external iliac artery tied with a silk ligature. It was now considered wisest to guard against recurrent hæmorrhage by tying the vessel in the wound. And, by a little dissection, it was demonstrated that the femoral artery was about half cut through on its posterior wall, just below Poupart's ligament. Ligatures were applied here, and both wounds united by silk sutures. The patient rallied well, and no bleeding recurred. From first to last, there was no peritoneal inflammation.

March 3d.—No hæmorrhage. Pain in left foot. Temperature of legs alike.

March 4th.—Great pain in leg and foot complained of. Relieved by morphia. Patient feeble. Pulse 150. Fed on milk punch. Temperature of right leg, 101°; of left leg, 92°. Distal phalanges of toes of left foot livid; sensation diminished there. Left leg and foot enveloped in cotton batting.

March 5th.—General condition better. Pulse 108. Wounds look healthy; less pain complained of. Temperature, right leg 100°; left leg 92°; one-half the foot blue.

March 6th.—More pain in leg. Temperature of left ham, 97½°. Entire foot mottled with livid lines.

March 9th.—Temperature of *both* popliteal spaces 100½°. Pulse 120; less pain.

March 13th.—Line of demarcation formed half way between ankle and knee. Foot and leg in a condition of moist gangrene, and quite offensive. The limb was imbedded in powdered charcoal.

March 24th.—General condition improving. Ligature came away from iliac artery (22d day). Wound doing well. Soft tissues of leg quite sloughed through.

March 29th.—Condition good. Spontaneous amputation down to tibia and fibula. Etherized; masses of granulations pushed back; bones denuded higher up, by scraping back the periosteum, and the bones sawed off. Moderate hæmorrhage.

May 10th.—The amputation has not resulted well. The bones are exposed; the stump is painful, and a raw, granulating surface extends up beneath the calf to the ham. Patient has three bed-sores. The wound in the abdomen is still open.

May 13th.—The limb was amputated above the knee by Dr. Ingalls.

May 18th.—Stump doing well.

May 22d.—Extension applied to draw down the flaps, which tend to retract.

May 25th.—Doing better.

June 23d.—There is an exfoliation of bone.

July 12th.—The periosteum was scraped back, two and a half inches of necrosed bone sawed off, the cicatrix was cut out, and the edges of the stump brought together.

July 20th.—Stump doing admirably.

July 30th.—Wounds all healed. Discharged, well.

It would appear that the vitality of the limb was so impaired by the ligature of the iliac artery, that nature could not cover in her sponta-

neous amputation, as she often does after frost-bite; nor could she repair an amputation of the thigh, even, without necrosis and shortening.

NITROUS OXIDE GAS.

By H. J. Barnes, M.D., of Boston.

Read before the Suffolk District Medical Society, October 31, 1874.

Since the discovery of the anæsthetic properties of ether, in 1846, the subject of anæsthesia has occupied so large a portion of our literature that, reluctantly, I invite your attention to another chapter.

But with the object of correcting what seem erroneous views respecting the administration of nitrous oxide gas, which have recently been published, and to show how it may be made useful and practicable, in place of ether, for painful examinations, short operations, and the adjustment of broken bones, this paper is prepared.

In the Journal of September 22, 1852, Vol. 48, No. 8, this subject was referred to in a communication by H. A. H., replying to the question, "Is nitrous oxide gas an anæsthetic?" The writer begs leave to reply, briefly, that it is not, and challenges the production of a case proving it is; after which, he cites the experiments of Davy, who said he breathed the gas for a week, and at the end had an increase of sensibility to pain, and it only proved to be intoxication. In a number of subsequent papers, in the same volume, these statements are refuted by numerous satisfactory experiments. But, since that time, the subject seems to have attracted little attention, until a case of death from its use was reported in the *Lancet* of February, 1873, page 174, which, by the way, is the only disastrous result from its use I have been able to find. The writer, in a review of the case, remarks "that a dentist stated to him 'that he never extracted a tooth until breathing had temporarily ceased;'" and then, in regard to this case, says "the first symptoms were rapidity of pulse, with diminution of volume, but the immediate cause of death was paralysis of respiration. Nitrous oxide gas, indeed, is not an anæsthetic at all. A true anæsthetic is an agent which suspends sensibility without, by any necessity, interfering with those processes on the continuation of which life depends. Nitrous oxide acts not in this way, but by suspending, for a brief period, one of the most important of the organic processes, that of respiration itself. For the reason named, the insensibility produced by the gas is a period of partial death. This interval, transient, doubtful, dangerous, may allow an operator time for a short operation, and, the agent away, the suspended function may return." A French chemist, writing recently on this subject, says "the gas only asphyxiates." Within a year, I have read an article in the Boston Medical and Surgical Journal, mentioning the attendant asphyxia when anæsthesia is produced by gas.

By the courtesy of the dental firm of Drs. Ball and Fitch, of this city, for the past four years, I have been permitted to use their office and gas for such operations as I saw fit, and I have had the advantage of many valuable suggestions as the result of their ten years' experience with the gas, during which time it has been administered by them not less than 15,000 times.

Ordinarily, a person is anæsthetized in from one to three minutes, by from twenty to one hundred inhalations of the gas, by which three or four gallons are consumed. The gentlemen spoken of recall but two patients who could not be brought under its influence. After breathing the gas continually for ten minutes, neither was sensibly affected in pulse, respiration or consciousness, and it was given up.

They remember a larger number, who, at the period of excitement, resisted its administration, and it was, for this reason, obliged to be suspended, they not having the means necessary to confine the patient, and compel the continuance of the inhalation through this stage.

Excitement, intoxication and narcotism are as distinctly observed as when ether is used, and this, too, without asphyxia, for this is accidental and not the necessary result.

The popular notion that it only asphyxiates, is, perhaps, explained by the imperfect method of administration when first used, inhalation and exhalation being carried on through a single opening, into a rubber bag, holding from five to ten gallons, necessitating the continued breathing of air and gas used many times. This is now changed, and inspiration is from the gasometer; while expiration closes the opening, and is carried on through another communicating with the surrounding air.

Asphyxia is now a comparatively rare occurrence, particularly if we follow the rule I quote from Dr. Bigelow's paper, entitled, "Alleged Death from Ether," published last year in the JOURNAL of Nov. 20th. "We should aim at anæsthesia by inebriation, not by asphyxia." If lividity be noticed when gas is used, a half turn of the stop-cock admits air, and the same relief is the result as when this condition follows the administration of ether and the sponge is removed.

The advantages in using gas in place of ether are briefly as follows:

The shorter time required to anæsthetize.

It is more agreeable.

There is rarely subsequent vomiting.

Its effects pass off quicker, three or four minutes being usually sufficient.

There is no danger of ignition when used.

The cost is very much less. Fifty dollars will purchase a complete apparatus for its manufacture, and about four cents a gallon will pay all other expense.

It is made from the nitrate of ammonia, which is placed in a glass retort over a spirit lamp. It quickly melts, and, apparently, boils, but it really undergoes decomposition, and is resolved into gaseous nitrous oxide and steam. It is passed through four jars, holding about two gallons each of water, and one, containing a solution of potash, to remove impurities. It is then conducted to the gasometer, and is ready for use.

The compressed or liquid gas is put in iron jars, holding what is equal to one hundred gallons of gas. These are filled, at six dollars each, and put in portable boxes, a foot and a half long, and about eight inches deep. With an inhaler, a rubber bag as a reservoir for the gas, and the necessary rubber tubing, the price is forty-eight dollars.

I have not observed hilarity as often in patients under its influence as with ether. A few pugnacious, excitable people are with difficulty

carried through the different stages without a struggle. Usually, the gas is taken from this class when their ruling passion is manifested. After the excitement has passed, a little explanation of its effects dissipates their fear, and, with renewed inhalation, they go off quietly.

Ten minutes is the longest time I ever kept a patient under its influence. There were no unpleasant symptoms accompanying or following its use in this case, which was for the removal of a small tumor over the orbit. I should not hesitate to continue it longer, were it necessary, and, since writing this paper, I have been informed, by Dr. W. H. Baker, of its employment in two cases of ovariotomy, one of them lasting over an hour and a half, during his service in the Women's Hospital, of New York.

I have used it thirty-five or forty times in the removal of wens, opening abscesses and felons, the extraction of in-growing nails, &c., and in each case the effect was satisfactory.

The expense and inconvenience of transportation will, perhaps, preclude its general employment in private practice, but, for hospitals, it seems particularly adapted.

Translation.

SUBCUTANEOUS SYMPHYSEOTOMY.

By Doctor Piccinini, of Cassano Magnago, Lombardy.

(From the Lyon Médical, October 25, 1874.)

Though symphyseotomy was born in France, it was soon abandoned there, and if modern text-books give it a place among obstetrical operations, it is only on account of its historical interest.

Professor d'Erchia Pietro (of Naples) attributes the rejection of this operation to three causes. The first is the accepted custom in France and England of always sacrificing the child for the safety of the mother; the next is the invention of Baudelocque's cephalotribe, which is superior to the hook of the English practitioners; and, lastly, the prevalence of induced premature labor, which permits us to avoid the disagreeable consequences of a pregnancy, by arresting it at any given moment.

It appears to me that, beside the causes mentioned by d'Erchia, there is another of greater importance; namely, the want of a definite rule to decide for the surgeon how much pelvic contraction indicates, and how much forbids, symphyseotomy, followed by the immediate application of the forceps. This is what has induced me to publish the ideas which guided me in this operation, which I performed with perfect success in May, 1870, saving both mother and child.

Symphyseotomy, in cases where the contraction had reached two inches and a quarter (about 65 millimetres), had given such bad results that it was soon abandoned. It was, therefore, important to fix precisely the degree of narrowing which permitted the operation, the moment at which it was indicated, and the immediate and subsequent precautions which should insure its success.

Symphyseotomy, that is the section of a fibro-cartilage, is, in itself, an equally harmless and simple operation. Joulin alleges that it is impossible, beforehand, to determine with perfect accuracy the amount

of contraction and the volume of the fœtal head, so that it might be necessary to follow the first operation with a second, to wit, the application of the forceps, and that this would add greatly to the danger of the former, and would be liable, according to him, to rupture the sacro-iliac ligaments. I do not hesitate to treat such allegations as absurd.

In the first place, it is rare for an experienced practitioner, with the many accurate instruments we now possess, to fail to determine exactly the amount of contraction. There is no reason to fear the application of the forceps, which, according to me, should follow every symphyseotomy, and I never have had occasion to deplore the accidents to which Joulin alludes. I presuppose, of course, that the forceps are applied by a skilful accoucheur. According to Joulin, symphyseotomy will permit the separation of the articular surfaces to the extent of from one inch to one inch and a half, which he holds corresponds to merely one centimetre's increase of the antero-posterior diameter. Experience shows that this is not the case. Professor d'Erchia has performed symphyseotomy in a case of contraction to two and one-fourth inches (65 millimetres), and according to me it should not be done where there is less than three inches (80 millimetres), and with the forceps he delivered a living child immediately afterward. The mother survived this application of the forceps, which, according to Joulin, should cause death by tearing the sacro-iliac ligaments.

As for me, the results of my practice are sufficient data; the amount of space permitting the operation is from three to three and one-half inches; after the operation, the forceps should be applied with care, and, by gentle traction and slight rotary movements, the child will be gradually delivered without further pain to the mother, or any traumatic complication. With a contraction to three inches, symphyseotomy will give an additional half inch, and the forceps as much more, making the antero-posterior diameter practically four inches, which is, certainly, a most satisfactory result.

Position of the Patient.—The woman should lie on her back, on a strongly inclined plane, the pelvis supported by a pretty hard cushion, and the head being the lowest part. It is clear that by this position the head of the fœtus is prevented from pressing on the pubes, and the operation is thus facilitated.

Preparatory Catheterization.—It is indispensable that the bladder should be empty during the operation; apart from the gain in the antero-posterior diameter, the bladder will be less exposed to injury from the instruments. It is well, after the evacuation of the urine, to depress the bladder with the point of the catheter, or, better still, to put it on one side, lest it should be caught under the arch of the pubes during delivery.

The Section of the Fibro-cartilage is to be performed by the subcutaneous method, according to the usual rules. The fold of skin may be made above the clitoris, and the best instrument is a slightly-curved tenotomy knife, with a blade which must offer a certain amount of resistance.

A Bandage for the Body must be arranged beforehand, and, after the operation, moistened with a solution of gum, so as to make it immovable. Its object is to prevent any separation of the thighs, either by a

movement of the patient, or by an accident on the part of those carrying her; indeed, she should not be moved till it is nearly dry. By the subcutaneous method, the suppuration is avoided which would otherwise increase the dangers. Another advantage is the suppression of sutures; for the soft parts, which, by this method, are spared, contribute greatly to holding the pubic surfaces in place.

To recapitulate, the conclusions of this paper are the following:—

1st. Never perform symphyseotomy when the pelvis is contracted to less than three or three and one-half inches (80 to 95 millimetres);

2d. Operate by the subcutaneous method;

3d. After section of the cartilage, apply the forceps;

4th. The position of the patient, the previous catheterization, the immovable bandage are details of great importance to the success of the operation.

To conclude, let me recall the statistics of symphyseotomy during five years at the hospital at Naples. Operations, 19; women saved, 15; children saved, 16.

Progress in Medicine.

REPORT ON OTOLOGY.

By J. Orne Green, M.D.

(Concluded from page 491.)

Desquamative Inflammation of the Middle Ear.—Wendt (*Archiv der Heilkunde*, vol. xiv.) continues his very thorough and interesting investigations on the pathological anatomy of the ear, by studying, clinically and anatomically, the tumor of the ear, which has been described under the name of cholesteatoma, or pearl-tumor. Such tumors have generally been described as a new growth, and have been so considered by Virchow, Gruber, Lucæ and others. Some other authors have even considered that they were closely allied to epithelial carcinoma. They are generally found either in the tympanum or mastoid cells, where the mucous membrane has been chronically inflamed and ulcerated, and consist of a pearl-like, oval or round mass, easily removed, which can be broken up into whitish lamellæ. Under the microscope, these lamellæ show large and small epithelial cells in a degenerated condition; between these cells are masses of cholesterine crystals and fat. The tumor generally fills the cavity in which it lies, and, by its growth, causes a destructive ulceration of the neighboring tissues, even the bone. Gruber mentions preparations in which the tumor has destroyed and replaced the entire petrous bone. In a previous report, ten cases of such tumors reported by Lucæ were noticed, in all of which there had been more or less destruction of the bone.

Some years ago, von Tröltsch, however, opposed the theory that the cholesteatoma was an independent and primary new-formation, and regarded it merely as a collection of inflammatory products, "a kind of retention tumor." Now Wendt supports this view, but goes farther, claiming that the cholesteatomata are the products of a peculiar form of inflammation, which he names the desquamative inflammation of the middle ear; that they consist of collections of an epithelium, secreted by the mucous membrane of the middle ear, but changed in

its form. In eleven cases, examined by Wendt during life, six were found to have their origin in the tympanum proper; in all the others, the tumors were present in the tympanum, but their direct origin could not be determined. The conclusions from his investigations, Wendt gives as follows:—

1. In the external meatus, tympanum and the cavities connected with it, collections of a peculiar cerumen-like substance are sometimes found.

2. Such collections originate, generally, in a desquamative inflammation of the mucous membrane of the middle ear, the epithelial covering of which, during the existence or after the cessation of a chronic inflammation, takes the character of the outer skin, by forming a *rete Malpighii*. From this *rete Malpighii*, cells, exactly resembling epidermal scales, are formed and thrown off; these cells collect in layers, and when shut off from the air undergo partial fatty degeneration.

3. The collections, when loose and dry, cause deafness of a moderate degree, provided there are no serious changes in the conducting apparatus of the ear; but extreme deafness when packed in tightly, or when swollen from moisture. They can also cause pain from the absorption of the moisture from a secretion in the ear, or from the entrance of fluid from without as after syringing.

4. They may be the cause of serious changes in the tympanum, the petrous bone, or even the brain, through the pressure which they exert on the neighboring parts from their increase in growth or from the absorption of liquid.

5. Their removal, although painful, and requiring a long time, is absolutely necessary.

6. It is highly probable that similar masses may be formed from the walls of the meatus, as the result of a chronic inflammation of that part of the ear, and that, from the meatus, they may find their way into the tympanum, through a defect of the membrana tympani, and produce the symptoms already described.

7. The cholesteatomata of the petrous bone, which have been described in the literature as composed of masses of epidermal cells, must now be regarded as the products of a desquamative process in the middle or outer ear, so long as a thorough investigation has not proved them to be of a different origin.

In a review of Wendt's article, von Tröltsch calls attention to the fact that gigantic, flat cells, closely resembling the epidermal cells of the outer skin, are found, normally, in the antrum mastoideum, and, also, that in some cholesteatomata examined by him a nucleus of dried pus was found in the centre of the mass, so that Wendt's description would not apply to all cases. He also repeats a suggestion made in his work on diseases of the ear, that it is probable that several diseases have been described under the one name of cholesteatoma of the petrous bone.

Embolus in the Mucous Membrane of the Tympanum.—Wendt (*Archiv der Heilkunde*, vol. xiv.) also gives the result of an examination in a case of embolus. A young woman, who died from metastatic abscesses in the lungs and liver, after an operation on the scapula, five days before death, suddenly lost the hearing of the right ear, and three days after, that of the left ear, also. The dissection showed, in addition to some old, the following recent, pathological changes: great swelling,

loosening and fragility of the mucous membrane around the foramina leading to the labyrinth on both sides, and on the left side, discoloration from blood, and numerous blood corpuscles in the tissue. The two stapes were immovably fixed in this swollen membrane. The investigations of Prussak and Brunner have shown that the mucous membrane of the tympanum is supplied by terminal arteries, the same as the liver, kidneys, retina, brain and lungs; those of Cohnheim, that the closure of a terminal artery may produce the very changes found here in the parts supplied by it. "In this case, the region of the embolus was, in the left ear, the upper anterior and the whole posterior part of the median wall and roof of the tympanum; it was sharply defined, discolored bluish black, swollen, œdematous, filled with blood-corpuscles, degenerated, and with a changed epithelium. In the right ear, the posterior half of the labyrinth wall was involved in similar changes."

Although the embolus itself could not be found in this case, the well-marked pathological changes, the suddenness of the attack and the freedom from preceding inflammation, which might have caused similar swelling, would seem to render the diagnosis certain.

Reports of Medical Societies.

NORFOLK DISTRICT MEDICAL SOCIETY.

[Reported for the JOURNAL.]

THE quarterly stated meeting of the Society was held at the Willard House, Hyde Park, on Wednesday, Nov. 11th, 1874, the President, Dr. EDES, of Roxbury, in the chair.

Dr. CLEMENT, of Roxbury, one of the appointed readers, introduced the regular discussion for the day by reading a paper on Drainage and Sewerage, in which he spoke of the use of sewers and of the present method of sewerage; he alluded to the discharge of sewage in improper places, and to the escape of sewer gases, with the means used to prevent such escape. He referred to the use and value of sewage matter, but did not consider that it was valuable enough, in this country, to pay for its removal and utilization; he therefore favored its discharge into large streams or into tide water.

Dr. DOWNES, of Quincy, read a paper, in which he insisted upon the importance of the subject, not only to physicians and sanitarians, but to the people at large. The writer thought that the question should not be left to private individuals, but should be taken in hand by the authorities.

The question most difficult to answer was, how to carry off sewage without contaminating the open streams, and how otherwise to render it harmless. He favored covered drains, as open streams become low at some seasons, and then are a nuisance. He spoke of the methods of utilizing sewage and of earth closets, but favored vaults and the air-tight apparatus for removing their contents.

Dr. AMORY, of Brookline, spoke of ventilating sewers, and described a case in which the ventilator did not prove a success, the gas still giving annoyance. He knew of no good way of ventilating sewers, except by long pipes running up to the tops of the houses.

Dr. MAYNARD, of Dedham, related a case of an establishment which had been built to accommodate six or eight people, with drains and other arrangements to suit that number; it was now made to accommodate sixty or more, with the result of producing an epidemic of fever, the inhabitants of the lower floor suffering much more than those on the upper. He thought it a striking instance of the result of bad sewerage. The drainage of houses is too often the last thing thought of by builders. Physicians ought to attend to this matter, in houses which they visit. He thought it as important to see to the drainage of a house as to prescribe medicine. Traps at the outlets of cisterns are seldom met with, and traps in sink-spouts are not as common as they should be.

Dr. H. P. BOWDITCH, of West Roxbury, said that the subject should be entrusted to those who, as commissioners, have supervision of large tracts of territory, so that some general principle of drainage might be followed. The combined action of large communities is necessary, so that sewage may not be shifted from one spot to another, but be carried to deep water on some general and comprehensive plan of drainage. He thought sewers were seldom large enough to carry off everything that was discharged into them. The sewers are built without reference to the possible amount of water to be passed through them.

Dr. DEARING, of Braintree, cited his own town as an example, and thought it like most other towns. The houses were generally built on elevated grounds, but the soil was wet, having a clay bottom and no drainage, so that it was damp for half the year. Butchers' shops abounded; four such were near his own house, and about these shops offal was left exposed without even being covered, so that hogs and the sun had free access to it. Cities have some drainage and are relieved in a measure, but the country towns suffer, since they have no system. Pig-pens, open and filthy and too near to houses, are an acknowledged cause of sickness, as are open drains and the receptacles of sink-water. Several such places were described, and the statement was made that typhoid fever, consumption and dysentery were common in them.

He thought the Society ought to do something as an organization of medical men; the selectmen of towns would not and could not do anything in their own towns. The matter should be under the care of the State Board of Health, whose power should be increased; and he advised an appeal to the legislature for such augmented authority.

Dr. Goss, of Roxbury, read an extract from the *Lancet* in reference to keeping separate surface water and sewage, and thought it had a bearing in the present discussion.

On motion of Dr. Amory, it was—

Resolved, That this Society recommend to its members to use their influence at the annual town meeting of the town in which they reside, for the election, as allowed by statute, of boards of health, separate and distinct from the boards of selectmen.

On motion of Dr. Dearing, it was voted that the President of the Society, with four members, be a committee to consider the matter of drainage and sewerage in Norfolk County, and report at the next meeting a plan by which it can be controlled by the State Board of Health, or on which the Society can present the matter to the next legislature.

A committee was appointed accordingly.

Dr. GIFFORD, of Stoughton, presented some fresh vaccine virus, and remarked that the humanized virus was better and safer than that direct from the animal, as he had seen two deaths recently from re-vaccination with animal virus.

Dr. TOWER, of Weymouth, asked Dr. Gifford if there was any limit to the amount of lymph one should take from a vesicle, or if all that would flow was good.

Dr. Gifford said he knew of no difference between the first and last that flowed. He had taken three hundred points from one vesicle, and it was all active.

Dr. Goss, of Roxbury, read an interesting paper on cases of cancer, in which nervous symptoms were very prominent.

Bibliographical Notices.

Note sur un Moyen, simple, facile, prompt et certain de distinguer la Mort vraie de la Mort apparente de l'Homme.

Note on a simple, easy, prompt and certain Method of distinguishing real from apparent Death in Man. By Dr. ANGE MONTEVERDI. Crémone. 1874. Pp. 20. With six Plates.

A CERTAIN sign of death has long been desired by the scientific, and perhaps even more by the ignorant, world. Every now and then we read in some paper a supposed case of premature burial, resting chiefly on the fact that the body is not found in the position in which the friends thought it should be. It would not probably be too much to say that ninety-nine of one hundred cases rest on no sufficient foundation. At Munich, every person, rich or poor, high or low, is obliged to lie a certain time after death (we think three days) in a public mortuary, and the string of a bell is fastened to the hand of the body. This custom has been in vogue for several centuries, during which the bell has been rung but a very few times, and we are not sure that in any case the ringing was caused by the revival of a supposed corpse. This shows how little premature burial is to be apprehended; but a single case of it in a century is a calamity that no efforts should be spared to avert. It is to be remembered that it occasionally happens that *post-mortem* changes are singularly slow to develop, that the precise moment of death is usually very difficult to establish, and that, therefore, any researches that may throw light on this question are of great practical importance. The large prize offered in Paris for a certain sign of death, shows the great weight that is there attached to the question.

Dr. Monteverdi's method of distinguishing real from apparent death consists in noting the appearances following an injection of ammonia under the skin. There are certain points in the author's physiology which we think are open to question; the vital principle plays a rather too prominent part. We are not going, *ex cathedrâ*, to deny absolutely the existence of such a principle, but we hold that if it exists it acts in accordance with natural and chemical laws, and not in opposition to them. According to the author, ammonia subcutaneously injected during health is followed immediately by a bright red spot, which rapidly extends, but reaches its limits in a short time, certainly in half an hour. If the injection be made when the patient is moribund, or in that mysterious state in which some spark of life may possibly exist, though its usual phenomena have ceased, the spot is smaller than in the previous case, but it develops about as rapidly; its color, however, is darker—that of red wine. If the injection be made after death, the spot appears and spreads much more slowly, and, what is most important, presents no red color; there is merely a dirty stain on the skin. The nearer death, the less marked the red color. This, like some other tests of death, rests on the theory that the capillary circulation continues, to some extent, after the

cessation of the heart's contractions, and that when it ceases death is surely there.

Dr. Monteverdi's experiments are numerous and carefully done, but the question occurs, has he ever been able to make a crucial examination? Granted, that if the bright red spot appears the man is not dead, can we be sure from its non-appearance that he is? Are there not rare cases in which the skin appears to die first? Though giving much credit to the author for what he has done, we fear the test is only negative after all. Before it can be absolutely accepted, it must be applied thousands of times, and a single failure deprives it of its value, for it is only for exceptional cases that a test is wanted.

We should like to see this test applied to the body of a man just withdrawn from the water, when the question of the possibility of resuscitation is about to be solved. If nothing is done, no change is seen till mortification sets in, and yet, often, judicious efforts may restore life. Would the test in such a case be of value? It remains to be proved.

Transactions of the Indiana State Medical Society. Twenty-fourth Annual Session. 1874.

THE President's Address had for its subject Alcohol and its Uses. The writer seeks to draw a line between the use and abuse of stimulants in medical practice. He defends the profession from the oft-repeated charge of intemperate temperance fanatics, that physicians prescribe alcohol "without science, common sense or conscience," and that "the man who prescribes it in any form is a quack." Passing by certain crude and erratic physiological notions expressed by the author—as, for example, the statement that "alcohol corrugates animal tissue"—we find much to approve in the sensible views expressed concerning the real utility of alcoholic stimulants.

We note, in passing, that the Indiana doctors, in convention assembled, believe in free speech and mutual improvement, for immediately after the President's address is the report of a discussion among the auditors, wherein the orator was subjected to much good-natured, but out-spoken, criticism.

A prominent feature of the Transactions is a Report on the Medical History of Indiana. We get here some entertaining sketches of the hardships endured by the early practitioners of the State.

The Stethoscope as a Means of Diagnosis in Fractures is the title of a paper by Dr. Laughlin. He illustrates, by a case, the observation that crepitus, which is imperceptible to the unaided hearing and touch, is made very clear with the assistance of the stethoscope.

Dr. Washburn urges the importance of legislation in behalf of the profession; the legalizing of dissections, the restriction of fœticide and of the sale of poison, the regulation of charlatanry and the reform of the coroner's office being specified as in pressing need of legislative attention in Indiana.

Dr. Elder describes a disease which he christens *Morbo Lacteo* (ablative absolute?), but which is better known, in the Mississippi valley at least, as the "milk-sickness," or "trembles." The disease is said to be caused by drinking the milk, or eating the flesh, of cows which have eaten some unknown poisonous shrub which is said to be present only in the grass of wild lands. The animals themselves suffer from symptoms analogous to those which their milk develops in human beings, and the disease sometimes proves very destructive to life. The chief clinical features in the human subject are intractable nausea and vomiting, great prostration, obstinate constipation and a peculiar fœtid odor having the "combined qualities of chloric ether and ptyalism." The treatment consists in the use of cathartics and stimulants; "once restore the peristaltic action of the intestines and the patient is on safe ground." The disease is never seen where the pasture-land has once been cultivated.

Dr. Boyd reports cases of puerperal eclampsia treated with veratrum viride.

Dr. Thompson contributes a long paper on Intra-ocular Diseases. The paper is embellished with colored plates of ophthalmoscopic appearances taken from cases reported.

Dr. Bell, in a paper of considerable merit, avows himself a believer in the theory that epilepsy and uterine diseases sustain an intimate relation to each other. The pertinent criticism followed the reading of the paper that it was remarkable how few epileptics there were among so many cases of uterine disease.

All the contributions to these Transactions are marked by earnestness and vigor. We cannot refrain from remarking that it is a pity that a work otherwise creditable should be marred by very numerous typographical errors.

Infant Diet. By A. JACOBI, M.D., Clinical Professor of Diseases of Children, College of Physicians and Surgeons, New York. Revised, enlarged and adapted to popular use by MARY PUTNAM JACOBI, M.D.

IN this little book of only 119 pages is contained a very large amount of information concerning the anatomy, physiology and chemistry of digestion during infantile life, with "directions for the mother in regard to the means of averting morbid alterations in the chemical changes that take place in the infant economy during the processes of nutrition."

The whole story, so to speak, has been very carefully written, and is told in a most interesting way, with the avoidance, as much as possible, of technical language.

We do not think that the statements herein contained have been all "restricted within the limits of what is already positively assured to science," as is proposed in the Preface. At any rate, much will be found here that is new to those readers who do not devote themselves specially to this branch of science. This is particularly noticeable in the description of the varied functions of the inorganic salts; and in the great importance attached to their proper supply in the food. As illustration, we are told of the phosphates, that a deficiency of the phosphate of potassa "impoverishes the blood," and that by this deficiency, also, "the muscles become weak." By the oxydation and heat following the contraction of muscles, "acids are formed in the substance of the muscles," that gradually accumulate as cinders do in a grate, and with a similar result, namely, the arrest of heat, "the activity of the muscle stopping also, as inevitably as does the work of a piston from which the supply of steam has been cut off. Moreover, an albuminous substance is coagulated in the muscles, making them stiff and painful. It is the phosphate of soda contained in the blood that neutralizes the acid and dissolves the coagulum, and thus restores the muscles to their freshness and vigor and enables more heat to be generated. Deficiency of phosphate of soda, therefore, interferes with the action of the muscles and thereby checks their development." "The phosphate of soda is one of the principal agents to maintain the alkalinity of the intestinal contents and to neutralize the various acids which are liable to form during the process of digestion. Insufficiency of this salt, therefore, will first favor acidity of the bowels and ultimately interfere with the formation of tissues, and especially with the growth of bone."

As causes of rickets are given:—1st. Deficiency of phosphates in the food to supply the place of those consumed in the organism. 2d. Excessive formation of acids in the digestive tube, which, being absorbed into the blood, dissolve out the phosphates already fixed in the body, especially in the bones, and carry them off in the urine. In this way, farinaceous food, when substituted altogether, or in part, for cow's milk, is often a cause of rickets; being liable to produce acid fermentation, it would also come under the second class of causes. Cow's milk, as it contains more than double the amount of phosphates proper to human milk, when injurious, could never be so from deficiency of phosphates, but would then come under the second class of causes. Meat, prematurely introduced into the diet of young children, by remaining undigested and giving rise to acids, would also come under the

second class of causes. The milk of anæmic or ill-fed women, which is also deficient in phosphates, may induce rickets as surely as artificial food.

Such an explanation of the cause of rickets as the one above given, we had supposed to be now generally abandoned. Certain it is that experience has fully demonstrated the futility of treatment by the administration of phosphates in the food or as medicine. The osseous tissues so affected are, to be sure, deficient in phosphates, not from a deficient supply, but because these will not take them up, in however great amount they may be offered; and to attribute to a deficient supply of phosphates the cause of the disease shows, at least, a want of appreciation of the whole process.

Is it not more rational, too, with regard to all the inorganic salts, to regard a deficient *supply* as a very rare factor in disease? The proportional amount required in food is so minute as rarely to receive particular care or attention in its preparation, and in disturbances of the organism, when they are found deficient, is it not more likely that other causes lie behind, producing, as one result, deficient appropriation by the economy, which deficiency may be accurately detected in the laboratory, but the importance of which in the causation of disease is overestimated, or at least not corroborated by experience at the bed-side?

We find, scattered through the book, a large number of practical suggestions, both for the mother and child, in the main excellent, as we should expect from one so qualified by ripe judgment and experience to speak *ex cathedrâ*.

For the purpose of diluting the milk, when necessary, the author recommends a thin and transparent solution of gum arabic; when, later, a substance is required that will act as a nutrient at the same time, he employs mostly decoctions of oat-meat or barley, as possessing all the necessary elements of nutrition (albumen and inorganic salts), without so much starch as to render it dangerous when well prepared. In place of "prepared" barley, he recommends every mother to grind it in a common coffee-grinder of her own, as thus no mistake or deception can take place. The author does not encourage the use of Liebig's food, or "patented articles of food," though admitting that "there may be some which deserve attention and credit." "I might name some," he says, "which now and then have proved beneficial in my own hands; and also some which, when I had the analysis made of two different bottles of the same box sent as specimens, yielded greatly varying results. Amongst the axioms we ought not to lose sight of is, that unvarying truth is in nature only; and that trade or money has no soul nor conscience."

In speaking of Liebeg's food, he writes:—"The recommendation is a good one. But the object of this paper is to show in what manner substances known to, and in the grasp of, every part of our population, can be employed as a perfectly harmless, reliable, nutritious article of diet. Such substances must have several qualities. They must be perfectly simple and recognizable. They must be found for sale everywhere. Their preparation must be perfectly simple and easy. . . . . .

"It looks as if the results of this food must be uniformly good, and since the disappointments in regard to its effects have been as many as its recommendations have been eulogistic, I have employed it myself with varying results. I believe that the attention required in preparing the food is the source of failures in most cases. Common sense is not at all a prerogative of every mother and nurse; and it appears that the requirements laid down in Liebig's plan demand too great a complication of cerebral functions on the part of cooks. The attempts at shortening this cooking process, by preparing for the market similar articles requiring less attention and time, are to be ranked amongst the patent merchandize of which I spoke before. It was one of these 'prepared Liebig's food' on which I made the experiments which I mentioned."

"The addition of chloride of sodium to the food is the more important the more the milk is mixed with a vegetable decoction." The chemico-physiological explanation of G. Bunge *(Zeitschrift f. Biologie)* is given as the most

satisfactory, namely: that "the craving for salt grows in proportion to the amount of potassa salts contained in the food." "The phosphate of potassa exists in the blood corpuscles alone, the chloride of potassium in both corpuscles and serum, and the chloride of sodium in the serum alone. If there should be in the blood more phosphate of potassa than can be taken up by the corpuscles, it will be immediately decomposed by the chloride of sodium in the serum; chloride of potassium and phosphate of soda are formed, and these are both eliminated by the kidneys and pass away in the urine. By this means, chloride of sodium is carried away, and must be replaced; in other words, vegetable food requires the addition of a great deal of salt. The substitution of cow's milk for woman's milk necessitates the addition of salt, for a similar reason; for while 1,000 parts of human milk contain only 0·70 chloride of potassium, 1,000 parts of cow's milk contain 1·30." "Owing to the relatively small amount of free alkali in cow's milk, it is recommended to add an alkaline salt (the carbonate or bicarbonate of potassa or soda) to cow's milk, and best at once, when the milk is put aside for the infant's use."

The device of parents to procure the milk of one special cow the author believes to be a mistake, as when the child has become accustomed to one cow's milk it will be more likely to suffer from the abrupt transition to that of another cow, a transition, nevertheless, often inevitable. He always advises the plan of giving the average milk of a farm, and has never been sorry for the results, Condensed milk is recommended, "the addition of loaf sugar" that is used in its manufacture "being rather an advantage than otherwise." We are surprised at this statement, for we have always considered that the large excess of sugar contained in the above preparation was very objectionable, and although robust, healthy children may often thrive upon it, this is certainly not the case with delicate or scrofulous children brought up with it. No mention is made of the condensed milk now obtainable in our large cities, manufactured without sugar and delivered fresh daily. When kept in a cold place, this keeps well for several days, and is in every respect a much superior article to that manufactured with sugar.

In answer to how babies are to be fed, "the only physiological method" he insists upon "consists in employing the nursing-bottle. Neither spoon nor cup prevents food of too hard a consistence from entering a baby's stomach. The fine preparation of an infant's food is equivalent to an adult's careful mastication. The greatest mistake on the part of mothers and nurses is that thick food is more nutritious; the truth is, that the nutritive power of food grows, *cæteris paribus*, with its dilution."

In conclusion, the author gives the following rules for the feeding of infants in general:—

I. About Nursing Babies.

Overfeeding does more harm than anything else. Nurse a baby of a month or two every two or three hours.

Nurse a baby of six months, or over, five times in twenty-four hours, and no more.

When a baby gets thirsty in the meantime, give it a drink of water or barley-water. No sugar. In hot weather—but in the hottest days only—mix a few drops of whiskey with either water or food, the whiskey not to exceed a teaspoonful in twenty-four hours.

II. About Feeding Babies.

Boil a teaspoonful of powdered barley (grind it in a coffee-grinder) and a gill of water, with a little salt, for fifteen minutes, strain it, and mix it with half as much boiled milk and a lump of white sugar. Give it lukewarm, through a nursing-bottle.

Keep bottle and mouth-piece in a bowl of water when not in use.

Babies of five or six months: half barley-water and half boiled milk, with salt and white sugar.

Other babies, more milk in proportion.

When babies are very costive, use oatmeal instead of barley. Cook and strain.

When your breast-milk is half enough, change off between breast-milk and food.

In hot summer weather, try the food with a small strip of blue litmus paper. If the blue paper turns red, either make a fresh mess or add a small pinch of baking soda to the food.

Infants of six months may have beef-tea or beef-soup once a day, by itself, or mixed with other food.

Babies of ten or twelve months may have a crust of bread, and a piece of rare beef to suck.

III. About Summer Complaint.

It comes from over-feeding and hot and foul air; never from teething. Keep doors and windows open. Wash your children with cold water at least twice a day, and oftener in the very hot season.

When babies vomit and purge, give nothing to eat or drink for four or six hours, but all the fresh air you can. After that time, you give a few drops of whiskey in a teaspoonful of ice-water, every ten minutes, but not more, until the doctor comes.

When there is vomiting and purging, give no milk.

Give no laudanum, no paregoric, no soothing syrups, no teas.

Typographical errors are few. The attention of the author should be called to a chemical mistake made in the instructions given for the detection of lime when present in adulterated milk (p. 91). The small quantity of lime-water recommended (℥i. to a pint), when added to milk, is probably a mistake of the printer. If we may be allowed to make one exception to the otherwise excellent arrangement of this little book, we would suggest that in the next edition an index of the contents be added.

BOOKS AND PAMPHLETS RECEIVED.

Transactions of the New Hampshire Medical Society. 1874. Concord. Pp. 129.

Twenty-third Annual Report of the Boston Provident Association. October, 1874. Boston. Pp. 24.

The Medical Use of Alcohol and Stimulants for Women. By James Edmunds, M.D. New York National Temperance Society and Publication House. 1874. Pp. 96.

Outlines of the Science and Practice of Medicine. By Wm. Aitken, M.D. Philadelphia: J. B. Lippincott & Co. 1874. Pp. 593. (For sale by James Campbell & Co., Boston.)

The Drift of Medical Philosophy. An Essay. By D. A. Gordon, M.D. Philadelphia: J. B. Lippincott & Co. 1875. Pp. 70. (For sale by James Campbell & Co.)

The Legal Relations of Emotional Insanity, By E. Lloyd Howard, M.D., of Baltimore. From the Transactions of the American Medical Association. 1874. Pp. 12.

State Street: A Satire. By author of Hard Knocks, &c. Published by A. W. Lovering. Boston. 1874. Pp. 29.

Sponge retained in a Stump after Operation.—*Le Mouvement Médical* mentions the case of a man who entered a hospital in Paris with a large granulating ulcer on the stump of his leg, consequent on amputation four months previously, in the reign of the Commune. On examination, a sponge was found imbedded in the granulations. It had been applied as a hæmostatic in the amputation and carelessly left in.—*The Doctor.*

Boston Medical and Surgical Journal.

BOSTON: THURSDAY, NOVEMBER 26, 1874.

THE editor of our esteemed contemporary, the *American Medical Weekly*, draws a comparison between English and American Medical Journals, by no means flattering to the latter. He dwells on the influence the English papers have in such public affairs as come properly within their province, and extols the fearlessness and independence by which it has been gained. So far, we agree with him entirely, and we are not inclined to differ from him very widely in his remarks concerning the American journals. We submit, however, that he hardly does justice to some of them, and if we put ourselves among these, we put the *Richmond and Louisville Journal* among them also. After praising the strictly medical departments in our journals, this critic complains that, as journals, they wield no power, and that every kind of abuse is passed by without censure. "American medical journals, by silence, evasion, disreputable display of irresponsibility, by facile eulogy and indiscriminate praise, do nothing to reward the right and punish the wrong."

It is undoubtedly true that our medical journals have comparatively little influence, and it is true, also, that the fault is chiefly their own. Their power has so long been dormant that it is disregarded; but we believe that if sufficiently exerted it would soon be recognized. We accept our share in the reproof that we have not done as much as we could; but we submit that we have done a good deal. We have had many charges laid to our door, but that of "facile eulogy" is entirely new; it at least presents us in a very different and, perhaps, more amiable light than do the letters we from time to time receive from the writers of rejected communications, and from the authors of many works coming to us for review. The supporters of the American Medical Association have never made any allusion to the "indiscriminate praise" we have lavished on that institution.

We lately claimed that some of the credit of the late rebuke to prohibition in this State is due to our efforts; but, be that as it may, we have never hesitated in our course, though aware of its unpopularity in many quarters. The following note to the publishers, from a town in Connecticut, gives a fair idea of the way our efforts were frequently received:—

"DEC. 31, 1873.

MESSRS. D. CLAPP & SON,—Enclosed, find dues for the 'JOURNAL,' and you will please stop it.

I prefer to read articles in the interest of the free rum interest in some other than my medical journal. Respectfully,

_____"

We took a leading part in the movement that suppressed, in Boston, a so-called "Museum of Anatomy," which had long been an eye-sore to the respectable portion of the community.

We hope to be pardoned the seeming egotism of saying so much of our own doings; we do so merely to show that, in the will at least, there is one journal that takes a higher stand than would be imagined from the article in question. We are, further, happy to believe that there are several others which, if they have not done their whole duty, have spoken out plainly and boldly against abuses. We have no desire to deny that the influence of our medical journals is far less than it should be, and we sympathize fully with the dissatisfaction that the *American Medical Weekly* expresses. We believe, however, that the remedy is in the hands of the medical press, and that by persistently demanding a hearing it can obtain one.

It cannot be denied that certain American Medical Journals are as low and bad as they well can be. It is most mortifying to feel that they may, perhaps, be taken, by those unfamiliar with this country, as specimens of its style. Such exhibitions as we sometimes see are so lamentable and humiliating that, in order not to weep, we must laugh at them. Listen, then, to the senior editor of the *Nashville Journal of Medicine and Surgery*, the President of the American Medical Association:—

"Whenever we corner a home contemporary, in a certain latitude, there is sure to come a wail from over the water, as though medicos on both sides were connected by a naval string instead of telegraph cable only. We have occasionally copied these lamentations for the amusement of our readers, under the head of 'Henglish 'Onesty.' One has just come over, with the *British Medical Journal*, with which we do not exchange, and its managers can only see ours when it is sent to them for a purpose. Managers of English journals are, for the most part, myths; no one knows who they are, no one cares who they are. A publishing house gives a medical corner to an advertising sheet, and dubs it a 'Medical Journal,' picking up some poor fellow lying around loose, with a medical education—only this and nothing more—to run the concern, allowing him enough broken victuals to

——'pit his painch in,'

as will prevent soul and body from singing out to each other that good old phrase 'good-bye!' No one knows him.* Possibly a descendant of the axe-man employed in ancient times to prevent a redundant population of the island, and, like his distinguished ancestor, he is only

* It is hardly necessary to mention that the *British Medical Journal* is the organ of the British Medical Association, and not under the control of any publishing house. The name and standing of the editor are perfectly well known to all conversant with medical journalism.—EDITORS BOSTON MED. AND SURG. JOURNAL.

abroad when masked. We never send our Journal to such snobs, and we repeat, that they can only get it when it is sent to them by others, and it is never sent without a special purpose. This purpose is, that one on this side of the water may get what, in his imbecility, he believes, a blow from the other side that will finish us. Poor fool, he forgets, or never knew, that a man, to be done for and wiped out, must do that little job for himself, which one is not very apt to do, who, with a few friends, organized a medical school, walked into it, and during the first decade, taught more than three thousand pupils—an achievement without precedent in the annals of Medicine—and of his own accord retired from active service, carrying with him the confidence of the host he had in part taught, and the warm friendship of every colleague. . . . . .

"Of course, we regard these blows as the highest compliment the medical Lilliputians who give them can bestow; and the more pompously vindictive the trans-Atlantic cold-victual man is, the more acceptable the compliment. The craven cry of 'help me, Cassius,' on this side of the water, is music to our ear, only surpassed in liquid sweetness by the responsive bellow of the insular little John Bull. . .

"Like the maggot-fly, he deposits his ovum, and is off, leaving its product to the chance of circumstances, while punishment seeks him in vain at his chop-house, armed with the fossil remains of yesterday's chicken, flanked with a mug of ale and a cold potato. He laughs, as he reads what an outraged fellow-subject or distant editor has printed in reply, and quotes Mrs. Webster's instructions, to first catch a rabbit before you roast it. Like his prototype, Bob Sawyer, he expresses his ecstacy by grimace, laughter and gesticulation. His yeasty ale seems champagne of the rarest vintage, and his subsoil edible is no longer rooty in flavor, but sweeter than the honey from the thyme of Ida."

It was long before the irritation which followed the publication of Martin Chuzzlewit subsided in America, but now that we look back at the matter, we are able better to discriminate between the true and the false than was to be expected at the time. Mr. Dickens's fault was not in drawing the offensive characters he did, but in implying that they were fair specimens of Americans, and that there was no better class worthy of notice. After reading the above extracts, who shall assert that Elijah Pogram and Hannibal Chollop were caricatures? Thank Heaven, they are not our representatives.

THE LATE JEFFRIES WYMAN.—At the October meeting of the Middlesex South District Medical Society, the following was adopted:—

That, while we can add nothing to the emphatic language in which numerous associations have testified to the incalculable loss which the recent death of Dr. Jeffries Wyman has inflicted upon the whole circle of natural sciences, we, the physicians of this district, cannot forget that we have lost an associate whose frequent communications to this society were of the highest practical value; that, though early leaving the practice of our profession, he never lost his interest in it; that during his life he was making constant additions to those sciences which underlie intelligent medical practice.

That in the future we shall miss not only the vast resources of his trained intellect, but the man deserving of love, an example in all respects worthy

of imitation, and a character which was an inspiration to all who came within the circle of his influence.

THROMBOSIS CAUSED BY A NEEDLE.—At a recent meeting of the Clinical Society of London, Dr. H. Thompson reported the case of a young woman of hysterical temperament, who was admitted into Middlesex Hospital with febrile symptoms of two days' duration. She had pain in the back, languor and loss of appetite. There were also pain and tenderness in the right iliac region and across the hypogastrium; and, indeed, the whole surface of the trunk appeared to be unnaturally sensitive. There was a systolic murmur at the apex, and the heart's action was tumultuous, but there was no history of rheumatic fever. The day after admission, she became wildly delirious, with a pulse of 160 and a temperature of 105° F., followed in the course of two hours by profuse sweating. On the following day, she had a rigor, with a temperature of 107·4° F., again followed by profuse sweating and a fall in the thermometer. This rigor was followed by others, so that, during the fifty-three days she remained under observation, there were rigors on nineteen, mere chilliness on four; both, as a rule, being followed by sweating. Vomiting or faintness either occurred with the paroxysm of shivering, or played the part of its representative. Whatever the mode of manifestation, the temperature at the time of the outbreak almost always culminated in a peak—on six days, at 105° F. or more; on twenty-six, at 104° F. or more. Twelve days after admission, phlegmasia dolens, with conspicuous enlargement of the superficial veins, appeared in the left lower extremity, and, forty-two days afterwards, in the right, and there remained until the death of the patient. About the time of the first appearance of the phlegmasia, she presented symptoms closely resembling symptoms of pericarditis; and, throughout the case, she complained of aching pain in various regions of the spine. Finally, after a protracted period of delirium, accompanied by profuse diarrhœa, she sank exhausted, and died on the fifty-third day after admission.

At the *post-mortem* examination, there were found to be numerous extravasations beneath the lining membrane of the third ventricle of the brain, but this organ was not otherwise diseased. In the chest, there were subpleural ecchymoses over both lungs, and the organs were œdematous. There were one or two old white patches on the surface of the heart. The mitral valve was thickened, and presented a chain of small vegetations along its auricular margins. In the abdomen, the inferior vena cava, from its commencement to the junction of the renal veins, was filled with a partially decolorized clot, adherent to the wall of the vessel, and channelled through its centre. At its commencement, just above the junction of the iliacs, the vessel was filled with dirty-brown matter; and in the midst of this a needle was noticed resting in an oblique direction, with its eye pointing downwards and slightly to the left, in close relation to an opening in the back of the vein, about an eighth of an inch in diameter. Immediately above this, another opening existed, measuring a quarter of an inch in diameter. Through these apertures, the body of the fourth vertebra could be felt, denuded of its periosteum. The left common iliac vein was filled with a brownish-red clot of moderately firm consistence and slightly adherent. The left external iliac and left femoral veins were as small as crow-quills, and were completely occluded by a whitish fibrous plug, which could not be detached from the wall of the vessel. The right common iliac, right external iliac and right femoral veins were obstructed and narrowed by a tough, fibrous-looking layer, firmly attached to the lining membrane. Immediately to the left of the third lumbar vertebra was an abscess, in which a second needle was found, lying obliquely across the body of the vertebra, the surface of which, however, was not eroded. The liver was engorged with blood. The spleen contained several infarctions, one about the size of a marble, softened in its centre. The intestines were much injected; the mucous membrane was the seat of extensive catarrh. The kidneys were normal.

The Hospitals.

MASSACHUSETTS GENERAL HOSPITAL.

REPORT OF OPERATIONS.

Service of Drs. Bigelow and Cabot. Saturday, November 14, 1874.

1. Hare-lip.
2. Deformity of Face.
3. Tumor of Nates ("Weaver's Bottom").
4. Painful Stump after Amputation of Thigh; Re-amputation.
5. Painful and Ulcerating Stump after Amputation of Foot; Re-amputation.
6. Cancer of Lip.
7. Extrophy of Bladder; Second Operation.
8. Necrosis of Frontal Bone; Eye destroyed; Enucleation.
9. Necrosis of Tibia.
10. Necrosis of Femur.
11. Amputation of Finger for Felon.
12. Caries of Os Calcis.
13. Abscess of Hand.
14. Abscess of Face.
15. Talipes Equinus.
16. Amputation of Contracted Finger.

The first hare-lip operation was performed upon a woman who had lost the lip and nose, as well as the soft palate, by scrofulous lupus, seventeen years before. As preliminary to making a nose from the forehead, Dr. Bigelow drew the upper lip together and united it, after dissection, upon the median line.

In the second case, that of a young man who had been operated upon in early infancy for double hare-lip, with an imperfect result, a more considerable operation was required. While a notch remained in the margin of the thin and scanty lip, the septum, which had failed to unite with the lip, projected from the tip of the nose. The latter was aquiline, and unusually prominent. Dr. Bigelow divided the lip upon the median line and pared the edges, removing the notch. The cheeks, with the alæ nasi, were then dissected freely from the bone, while the fleshy septum and the extremity of the nose, were raised from the cartilaginous septum for more than an inch. The edge of the latter was then pared and shortened, so as to reduce the prominence of the nose and allow the short, fleshy septum to be inserted in the interstice of the lip. The whole has now (six days later) united by first intention, and the profile is much improved.

The tumor of nates ("weaver's bottom") was of six years' duration, in a man seventy-two years old. This was a tumor of the size of a large cocoanut, depending from the lower part of the right nates. The patient had been making hoops, sitting astride of a bench and leaning on the right buttock, thus creating a friction which doubtless caused the tumor. The growth was movable, fluctuating, with a firm, thick wall, its outline uniformly rounded with a neck, and nowhere lobulated. Dr. Bigelow remarked upon the probable development of this tumor from a bursa near the tuberosity, and stated subsequently, at his clinical lecture, that the affection was mentioned in Bryant's Surgery, under the name of "weaver's bottom," as being not uncommon among the Spitalfields weavers. The tumor was punctured with a trocar, and nearly two quarts of fluid drawn off, of a reddish-brown color, slimy, highly albuminous, and containing abundant cholesterine (seventy-one grains by subsequent filtration). Some straw-colored coagula, which also escaped, proved to be structureless albumen. The sac was then dissected out, adherent chiefly at the tuberosity, and averaging a quarter of an inch in thickness. The wound was left open, the flaps falling into place, Dr. Bigelow remarking that, by the imprisonment of pus, more harm than good usually

resulted from any attempt to adjust accurately, with stitches, the fatty integuments of the back, after the removal of tumors.

H. H. A. BEACH, M.D., *Surgeon to Out-patients.*

BOSTON CITY HOSPITAL.

Service of Drs. Fifield and Gay.

LAST Friday, Nov. 13th, Dr. Fifield amputated the arm of a female patient aged 19 years, who had been in the Hospital since September 10th, suffering the severe effects of an extensive burn. Six days before her entrance, her clothes caught fire, and, before the fire was extinguished, her right forearm was deeply burned from the fingers to the elbow. There were also less severe burns on the arm above the elbow and on the back. The tissues of the forearm were so deeply involved that sloughing was extensive, and several of the fingers became gangrenous. In course of time, all the fingers were lost, either by sloughing or by amputation. The ulcerated surfaces were variously treated, but the healing process was stationary. Oxide of zinc ointment, oxide of zinc in powder, skin-grafting and other remedies proved satisfactory in only a slight degree, and amputation was at length resorted to.

The interesting features of the operation were, the use of Esmarch's method for the control of hæmorrhage and the torsion of all the arteries in the stump. Both procedures gave entirely satisfactory results. The section was in the middle third of the arm. There was not the slightest subsequent accident or complication, and the healing of the stump proceeded without interruption.

Dr. Gay recently had a case of amputation in which the wound made by the injury was utilized in making the flaps. The patient was a young girl who fell from the front platform of a horse-car; the wheel passed over the right arm, making a compound and comminuted fracture of the humerus in the middle third of the left shaft. The skin over the biceps was severed longitudinally, exposing the muscle. The periosteum was stripped from the humerus over a space two inches long.

In performing amputation, Dr. Gay used the opening in the skin to bound the flaps of the stump, instead of going entirely above the wound and making a much shorter stump. The method was not followed by any untoward result. There was no sloughing of the flaps, and the patient left the hospital, after twenty-four days, perfectly well.

Two cases of Thyroid Dislocation of the Hip-joint have recently occurred in Dr. Gay's service. Both were successfully reduced by Dr. Bigelow's method of manipulation. The first case was that of a laboring man aged 25, who was injured while at work in the hold of a vessel. A bale of hemp fell from a distance above him, striking him in the back and spreading his legs wide apart when he fell. After etherization, the thigh was found to be strongly abducted and flexed on the pelvis to an angle of 35°. Extension was impossible. There was a very distinct depression over the great trochanter, with a corresponding prominence at the upper and inner side of the thigh. With the finger in the rectum, the head of the femur could be felt at the upper part of the thyroid foramen. The injured limb appeared relatively lengthened, there being a difference of an inch and a half in the distance from the anterior superior spine of the ilium to the top of the great trochanter, when compared with the sound side.

The femur was strongly flexed, abducted and rotated inward. In the course of this manipulation, the head of the bone could be felt slipping up and down on the brim of the acetabulum. On the third repetition of the operation, the bone was felt to slip into place, and all deformity was relieved. The patient was discharged, well, after thirteen days.

In the second case, the injury was produced by a fall of fifteen feet upon the deck of a schooner. The symptoms of dislocation were similar to those in the case just described. The same method of reduction was adopted, success attending the first attempt.

Medical Miscellany.

SCARLATINA is very prevalent throughout Great Britain and Ireland.

TRACHEOTOMY IN SPASMODIC CROUP is indicated in exceptional cases only.

PROF. BURT G. WILDER will give the course on Physiology at the next term of the Medical School of Maine.

IT has recently been computed that there is a birth in London every five minutes, and a death every eight minutes.

DYSPNŒA IN LARYNGEAL CATARRH is rarely observable in adults.—*Niemeyer's Lehrbuch.*

THE British Medical Association will meet in Edinburgh next year. Preparations have been begun, and "lively and pleasant expectations" of the visit are already indulged in.

RHANUS FRANGULA is described by Mr. Joseph Ince, in the *Chemist and Druggist* (June 15, 1874), as a non-drastic, safe, pleasant and efficient purgative.

LOSS OF HUMAN LIFE BY CHOLERA.—The total number of deaths from *cholera Asiatica* during its panepidemics over the earth, which have occurred twice between the years 1816–1860, has been estimated at forty millions.—*Zeimssen's Handbuch.*

RAPIDITY OF THE SPREAD OF CHOLERA.—Cholera has never been known to advance over a given territory at a more rapid rate than the ordinary vehicles employed in facilitating intercourse between that district and some other locality already infected.—*Zeimssen's Handbuch.*

THE REGISTRATION OF DISEASES.—The Legislature of New Zealand has passed a law requiring every medical man to give information to the health authorities of the existence and place of all cases of zymotic disease which come under his observation.

THE ORIGIN OF TRANSFUSION.—According to reliable records, transfusion was first practised, in 1492, upon the person of Pope Innocent VIII. The operator was a Jewish physician. The experiment was tried three times. The result of the treatment was that the blood-donors, three in number, died, as well as the decrepit pontiff himself.

INJECTIONS OF COD-LIVER OIL FOR ASCARIDES.—The *Journal des Connaissances Médicales* publishes a communication from Dr. Szerleki, of Mulhouse, on a case of irritation of the anus and adjoining parts, which was very greatly relieved by injecting an ounce of cod-liver oil into the rectum. —*The Obstetrical Journal.*

THE PREVENTION OF ZYMOTIC DISEASES.—Dr. Lyon Playfair, in his address as President of the Health Section of the British Social Science Association, says: "The isolation of patients afflicted with smallpox, scarlatina and measles will one day become part of hygienic law, though at present it would not be supported by public opinion.

PROF. ESMARCH recently attended a meeting of the Clinical Society of London, and gave a very interesting account of his method of controlling hæmorrhage, together with some reports of cases in which he had seen gratifying success attend its uses. Out of three hundred cases, in which the method has been employed by him, no evil result has followed in any one. His cases had done better, he said, than those treated antiseptically, and with the ordinary means of controlling hæmorrhage.

ANTE-NATAL DEVELOPMENT OF NINE TEETH.—At a recent meeting of the Philadelphia Obstetrical Society, Dr. C. H. Thomas related the case of an infant which, though normally constituted otherwise, exhibited nine perfect teeth when born. In addition to these, a number of small, whitish nodules could be seen and felt along the line of the gums, above and below, lying underneath the mucous membrane, and evidently marking the location of all the other deciduous teeth.—*The American Journal of Obstetrics.*

COLLODION IN CERVICAL ADENITIS.—Dr. Tournié strongly recommends the application of flexible collodion when the superficial cervical glands are enlarged and threaten to suppurate and the skin over them is inflamed. The inflamed region is painted over with a double layer, and an additional layer is added during each of the next three or four days. The application is useless in deep-seated adenitis, or when the glandular swelling assumes a chronic form, without heat and redness of the skin. The object is to prevent the formation of abscess, but when this has actually formed, the application is useless.—*L'Union Médicale.*

FEMALE CATHETER AND THERMOMETER CASE COMBINED.—Dr. Jas. R. Chadwick describes a simple and ingenious procedure for transforming the metal case of the clinical thermometer into a female catheter. This idea is carried into effect by having two eyelets punched in the lower end of the case, and an opening made in the rounded end of the cap, just small enough to prevent the thermometer escaping. It is, of course, essential that the cap should either screw on to the case, or at least fit tightly, inasmuch as without the cap the instrument has hardly sufficient length.—*The Obstetrical Journal*, October, 1874.

NOTES AND QUERIES.

LE(A)D ASTRAY!—Such, says a non-professional reader of the article, should be the title of that remarkable case of impregnation by a rifle ball, in No. 19 of *The American Medical Weekly.*

THE LYNN CITY HOSPITAL will be a reality before many days. . . . . At the last meeting, the Association passed the following liberal resolution:—"As this institution is intended to meet the wants of the entire community, there shall be no discrimination in favor of any school of medicine."

This was in a morning paper a day or two since. Will some of our Lynn brethren let us know what the "liberal resolution" means. ??

DIED,—In Salem, Nov. 18th, Dr. E. B. Peirson, aged 57.—In South Boston, Nov. 20th, Dr. Paschal P. Ingalls, aged 38.

MORTALITY IN MASSACHUSETTS.—*Deaths in sixteen Cities and Towns for the week ending November* 14, 1874.

Boston, 143; Worcester, 17; Lowell, 23; Milford, 1; Chelsea, 4; Cambridge, 24; Salem, 6; Lawrence, 11; Springfield, 7; Lynn, 2; Gloucester, 3; Taunton, 6; Newburyport, 5; Somerville, 10; Fall River, 19; Holyoke, 6. Total, 287.

Prevalent Diseases.—Consumption, 52; pneumonia, 32; scarlet fever, 18; typhoid fever, 13; croup, 10; diphtheria, 5.

CHAS. F. FOLSOM, M.D.
Secretary of the State Board of Health.

DEATHS IN BOSTON for the week ending Saturday, Nov. 21, 145. Males, 79; females, 66. Accident, 3; abscess, 1; apoplexy, 4; inflammation of the bowels, 2; bronchitis, 6; congestion of the brain, 1; disease of the brain, 3; cancer, 4; cholera infantum, 1; cerebro-spinal meningitis, 2; consumption, 27; convulsions, 3; croup, 4; debility, 2; diarrhœa, 4; dropsy of the brain, 3; diphtheria, 3; dysentery, 1; erysipelas, 1; scarlet fever, 4; typhoid fever, 3; disease of the hip, 1; disease of the heart, 3; hæmorrhage, 1; intemperance, 2; disease of the kidneys, 3; disease of the liver, 2; laryngismus stridulus, 1; congestion of the lungs, 1; inflammation of the lungs, 14; marasmus, 7; measles, 3; old age, 5; paralysis, 3; pleurisy, 2; premature birth, 2; peritonitis, 4; puerperal disease, 2; syphilis, 1; tetanus, 2; teething, 1; varicella, 1; unknown, 2.

Under 5 years of age, 53; between 5 and 20 years, 12; between 20 and 40 years, 33; between 40 and 60 years, 24; over 60 years, 23. Born in the United States, 107; Ireland 26; other places, 12.